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**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

PARUS HOLDINGS INC.	)	Civil Action No. 6:19-cv-432-ADA
Plaintiff,	)	<b>Lead Case</b>
v.	)	
APPLE INC.,	)	
Defendant.	)	
_____	)	
PARUS HOLDINGS INC.	)	Civil Action No. 6:19-cv-433-ADA
Plaintiff,	)	
v.	)	
GOOGLE LLC,	)	
Defendant.	)	
_____	)	
PARUS HOLDINGS INC.	)	Civil Action No. 6:19-cv-437-ADA
Plaintiff,	)	
v.	)	
LG ELECTRONICS INC. and	)	
LG ELECTRONICS U.S.A., INC.,	)	
Defendants.	)	
_____	)	
PARUS HOLDINGS INC.	)	Civil Action No. 6:19-cv-438-ADA
Plaintiff,	)	
v.	)	
SAMSUNG ELECTRONICS CO., LTD. and	)	
SAMSUNG ELECTRONICS AMERICA,	)	
INC.	)	
Defendants.	)	
_____	)	
PARUS HOLDINGS INC.	)	Civil Action No. 6:19-cv-454-ADA
Plaintiff,	)	
v.	)	
AMAZON.COM, INC.,	)	
Defendant.	)	

**DEFENDANTS’ OPENING CLAIM CONSTRUCTION BRIEF**

**FILED UNDER SEAL**

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**I. SUMMARY OF THE ASSERTED PATENTS**

The ’431 and ’084 patents share a specification and describe a system for acquiring desired information over a network. The system is a “voice browsing system” that “maintains a database containing a list of information sources, such as web sites.” ’431 Patent at Abstract. A user accesses the voice browsing system, which “initiates an interactive voice response (IVR) application” to present options to the user for desired categories of information, such as weather, news, or stock quotes. *Id.* at 15:46-51, Fig. 3. The user selects the desired option by speaking into a voice enabled device. *Id.* at 15:52-54. Speech recognition is used to determine the user input command so that the system may locate an appropriate website from a database of addresses. *Id.* at 15:55–16:7, Figs. 1 & 3.

For each category, the database includes a plurality of ranked websites that may be accessed to retrieve the desired information. *Id.* at 16:31-34, Fig. 2. The site with the highest rank is accessed, and if the information is not found, the system searches each of the ranked sites in order “until the requested information is retrieved or no more web sites [sic] left to check.” *Id.* at 16:37-43. The IVR system that receives a user’s spoken request then provides audible answers to a user’s information request. *Id.* at 4:59-62.

**II. ARGUMENTS****1. “web site”**

<b>Defendants</b>	<b>Parus</b>
collection of linked and related web pages for browsing by a user with a web browser	plain and ordinary meaning

While hiding behind the label “plain and ordinary meaning,” Parus incorrectly equates “web site” with anything accessible over a network. During meet and confer on claim construction, Parus proposed that “web-accessible databases” are also “web sites.” Similarly, Parus’s infringement contentions assert that any information obtainable from the internet, such as

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news, stock prices, and weather information, comes from a “web site.” *See, e.g.*, Ex. A at 173-77. One of ordinary skill would not interpret “web site” so broadly. In the context of the Asserted Patents, “web site” refers specifically to linked and related web pages for browsing by a user with a web browser. Ex. B, Dictionary of Computing (“website = collection of web pages that are linked and related and can be accessed by a user with a web browser”). Because the parties present a clear dispute as to claim scope, the Court should construe the term. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008).

A “web site” is not just any information source on the internet; indeed, the internet includes many information sources that are not web sites. As the Asserted Patents explain, the “voice browsing system ... contain[s] a list of information sources, *such as web sites*, connected to a network.” ’431 Patent at Abstract, 3:51-53; *see id.* at 4:30-32 (the invention “allow[s] users to browse information sources, *such as web sites*”); 4:56-58 (“The web browsing server then accesses the appropriate information source, *such as a web site*.”). And a “web site” is certainly not a database. *See id.* at Fig. 1 (showing web sites 114 and database 100 separately and in different shapes). While a website may present data that it gets from a database, that does not make a database a website—just like the fact that a supermarket provides goods that come from a warehouse does not make the warehouse a supermarket.

The difference between any information source and a “web site” is particularly important in view of the prosecution history. The claims of the ’431 Patent originally recited gathering information from “*information sources* connected to a network.” Ex. C, ’431 File History at PARUS\_00004520. The Examiner rejected these claims based on columns 5-6 of Perrone, which discloses accessing “Resources” on a server, which “include[s] *databases* accessible through a server.” Ex. C, 431 File History at PARUS\_00005377; Ex. D, U.S. Patent No. 6,157,705 (“Perrone”) at 6:18-20. The Applicant then struck “information sources,” replacing it with “*pre-*

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*selected web sites*” and “*a plurality of websites*” and repeatedly explained that the claims were directed to retrieving “pre-selected web sites” in contrast to Perrone and U.S. Patent No. 6,807,257. Ex. C, ’431 File History at PARUS\_00005409, PARUS\_0005418-19. In doing so, the Applicant confirmed that web sites in the Asserted Patents are not equivalent to internet accessible information sources, including databases. “Prosecution disclaimer precludes patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Aylus Networks Inc. v. Apple Inc.*, 856 F.3d 1353, 1359 (Fed. Cir. 2017) (internal markings omitted).

“Web site” should therefore be construed to properly describe a “website” as Parus confirmed during prosecution, and not other non-website “information sources” such as databases. The point of the Asserted Patents is to allow users to browse and navigate web sites—not merely to allow computers to access databases or other information sources. “The present invention relates to a ... system that allows *users to browse web sites* ... by using conversational voice commands.” ’431 Patent at 1:20-24. This purported invention is an alleged improvement to prior art options for “provid[ing] *a user* with access to the Internet *to browse web sites*.” *Id.* at 1:40-41. This is billed as an improvement over prior art PDA and web-phone systems that needed to access “web sites ... specifically designed to allow access by these devices.” *Id.* at 1:64-65. For that reason, the Asserted Patents repeatedly describe the alleged invention as a “voice *browsing* system,” or “voice *browser* system.” *See id., passim.* The Asserted Patents themselves are titled “Robust voice *browser* system...” *Id.* at Title. Thus, the “voice *browsing* system and method [] *allows users to browse web sites* using conversational voice commands.” *Id.* at 3:42-44.

Consistent with the crux of the Asserted Patents, they have full disclosures of how to browse web sites via voice commands—functionality that only makes sense in the context of web sites, as opposed to databases or other information sources. In particular, the Asserted Patents describe a “content description [that] directs the extraction agent where to extract data from the



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accessed web page” and also “indicates the location on the web page where the response information is provided.” *Id.* at 7:24-25, 7:31-32. “For example, the content description for a web page providing weather information would indicate where to insert the ‘city’ name or ZIP code in order to retrieve Chicago weather information.” *Id.* at 7:26-30. Table 5 provides information for accessing [www.cnn.com](http://www.cnn.com) through a particular web page, [http://cgi.cnn.com/cgi-bin/weather/redirect?zip=\\_\\_zip](http://cgi.cnn.com/cgi-bin/weather/redirect?zip=__zip), and Table 6 provides information for accessing [www.lycos.com](http://www.lycos.com) through <http://weather.lycos.com/wcfiveday.asp?city=zip>. It makes no sense to use the complex content descriptor files of Tables 5 and 6 if, for example, known database calls which directly locate the requested information are sufficient. Such content descriptor files are needed precisely because the claimed voice browser is browsing web pages on web sites made for web browsers. *See Atlas IP, LLC v. Medtronic, Inc.*, 809 F.3d 599, 605 (Fed. Cir. 2015) (holding that “in the context of the claim and the whole patent document,” the term “establish” means more than “initiate” where “the specification validates” the more specific construction).

## 2. “recognition grammar”

Google / LG / Samsung	Amazon / Apple	Parus
a predefined subset of words and predefined rules specifying the sequences in which a user can put those words so that they can be recognized by the speech recognition engine	predefined set of words and phrases a user can say that will be recognized by the speech recognition engine	what a user can say in natural language that will be recognized by the speech recognition device

a) Google / LG / Samsung’s Position

“Recognition grammar” is a term of art in the field of speech recognition, which is the subject of the Asserted Patent. *See, e.g.*, ’431 Patent at 1:20-26, 4:30-43. As explained by the World Wide Web Consortium’s (W3C) Speech Recognition Grammar Specification, “A speech recognition grammar defines *what a user can say*. Technically, it defines the syntax of the spoken input that can be heard by a speech recognizer.” *Id.* § 5.2 (emphasis in original). The W3C is a

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foundational organization in the development of internet standards, including, for example, the HTML standard, the markup language used for web pages. *See, e.g.*, HTML 4.0 Specification at <https://www.w3.org/TR/1998/REC-html40-19980424/>. The W3C grammar specification is an industry standard developed by the W3C Voice Browser Working Group. *Id.* at Abstract. And the Asserted Patents confirm that they are applying this term of art. “The natural speech recognition grammars (*i.e.*, what a user can say that will be recognized by the speech recognition engine) were developed by Webley Systems.” ’431 Patent at 6:21-24.

The term of art “recognition grammar” defines the subset of words and sequences of words that the speech recognition engine is capable of recognizing. The subset of words and word sequences can be recognized using a combination of the words themselves and ***defined rules*** governing those words. Google/LG/Samsung’s construction incorporates this understanding.

A recognition grammar must define the word or sequences of words that the speech recognition engine is capable of recognizing. If it does not, the speech recognition engine would not recognize those words when spoken by a user. The Asserted Patents explain that a recognition grammar is “what a user can say that will be ***recognized*** by the speech recognition engine.” ’431 Patent at 6:22-23.<sup>1</sup> As explained by the W3C Speech Recognition Grammar Specification, “[G]rammars for use in speech recognition ... ***specify the words and patterns of words to be listened for*** by a speech recognizer.” Ex. E, *Abstract* and § 1. Moreover, the Asserted Patents explain that the patents’ grammars “were developed by Webley Systems.” ’431 Patent at 6:23-24. Webley Systems is a predecessor to Parus; Webley’s grammars [REDACTED]

[REDACTED] Ex. F. Accordingly, the construction by Google, LG, and Samsung

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<sup>1</sup> Unless otherwise noted, all emphasis is added.

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includes that a recognition grammar is “*a predefined subset of words and predefined rules specifying the sequences in which a user can put those words so that they can be recognized by the speech recognition engine.*”

Further, a recognition grammar defines the subset of words and word sequences that can be recognized and *defines the rules* governing those words. The W3C Speech Recognition Grammar Specification explains, “Technically, [a speech recognition grammar] *defines the syntax of the spoken input that can be heard* by a speech recognizer.” Ex. E, § 5.2. This syntax is expressed by rules.

As seen in Table 2, recognition grammars have two components.

TABLE 2

---

?WHAT_IS	?the weather	?[info information report conditions]
	? ( (?like in )	
	[	
UScities.n	{<param1 \$n.zip> <param2 \$n.city> <param3 \$n.state>}	
	( (area code) AREA_CODE:n ) {<param1 \$n>}	
	( AREA_CODE:n (area code) ) {<param1 \$n>}	
	( (zip ?code) ZIP_CODE:n ) {<param1 \$n>}	
	( ZIP_CODE:n (zip ?code) ) {<param1 \$n>}	
	]	
	)	
		) {<menu 194>}

---

First, there are the actual words themselves, such as “the,” “weather,” “info,” “information,” “report,” “conditions” “like,” and “in.” ’431 Patent at Table 2. This is “the part of a grammar that defines words or other entities that may be spoken.” Ex. E, § 2.1. Second, there are the rules that define how certain combinations of words appear, represented, for example, by the question mark, parentheses, and brackets. ’431 Patent at Table 2. These rules define particular optional and mandatory sequences of words that can be recognized if spoken. *See* Ex. E, §§ 2.2-2.5. There are also rules for adding “[r]eferences to rules defined in other grammars,” including for example references to recognition grammars for cities, area codes, and zip codes. *See id.* § 2.2; ’431 Patent at Table 2. Those referenced grammars themselves are words and rules for sequencing such words. Accordingly, the construction by Google, LG, and Samsung explain that a recognition grammar is

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“a predefined subset of words and *predefined rules specifying the sequences in which a user can put those words* so that they can be recognized by the speech recognition engine.”

Parus’s definition of recognition grammar fails on two fronts. First, Parus incorrectly defines a recognition grammar solely by what it does rather than what it is. If a recognition grammar is simply “what a user can say ... that will be recognized by the speech recognition device,” then literally every speech recognition engine would have a recognition grammar, since every speech recognition engine is capable of recognizing at least some speech. Moreover, Parus’s construction is at odds with the Asserted Patents’ statement that the recognition grammars at issue were “developed by Webley Systems.” Certainly not every speech recognition engine uses a Webley Systems recognition grammar.

Second, Parus incorrectly asserts that recognition grammars relate to “natural language.” This is contrary to how one of ordinary skill would understand a recognition grammar. The W3C Speech Recognition Grammar Specification expressly distinguishes a “recognition grammar” from natural language: “A speech recognition grammar defines *what a user can say*,” unlike a “Natural Language Semantics specification which will represent interpreted spoken input: *what a user means*.” Ex. E § 5.2 (emphasis in original).

Recognition grammars are used to recognize language that may not be natural. The recognition grammar of Table 2 defines recognizable words and word sequences, including unnatural statements; a user can say the incomplete sentence “weather in Chicago” and the speech recognition engine will recognize that word sequence. ’431 Patent at Table 2. Other recognized commands not in natural language include “yellow pages,” “Mexican Restaurants,” “Italian Restaurants,” or “American Restaurants.” *Id.* at 15:55-63. “A construction that would exclude the preferred embodiment ‘is rarely, if ever, correct.’” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1379 (Fed. Cir. 2014).

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Indeed, the Asserted Patents point to the grammars “developed by Webley Systems” as examples of a “recognition grammar,” [REDACTED]

[REDACTED]. Ex. F. Thus, a recognition grammar is a predefined subset of words and predefined rules specifying the sequences in which a user can put those words so that they can be recognized by the speech recognition engine.

b) Amazon / Apple’s Position

The specification defines the term “recognition grammar”: “The natural speech recognition grammars (*i.e., what a user can say that will be recognized by the speech recognition engine*) were developed by Webley Systems.” ’431 Patent at 6:21-24; ’084 Patent at 6:35-38. “When a patentee explicitly defines a claim term in the patent specification, the patentee’s definition controls.” *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009).

Amazon and Apple’s proposed construction tracks the specification’s language defining “recognition grammars” with one clarification that the pronoun “what” refers to a “predefined set of words and phrases.” Under Federal Circuit law, a patentee’s express definition may be modified to resolve ambiguity. *See, e.g., Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1344-45 (Fed. Cir. 2009) (modifying patent’s express definition of term “sanitize” to resolve ambiguity and make clear that sanitizing meat to make it “safe for human handling and consumption” meant safe for consumption only after cooking). Because the express definition itself does not explicitly specify what the pronoun “what” is referring to, this additional context is necessary. *See Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1348 (Fed. Cir. 2010) (“The terms, as construed by the court, must ensure that the jury fully understands the court’s claim construction rulings and what the patentee covered by the claims.”) (internal quotation omitted).

Per the specification, the term “what” in the definition of “recognition grammar” refers

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only to a predefined set of words and phrases. “Recognition grammar” appears three times in the specification, each time consistent with Amazon and Apple’s proposed construction. *See* ’431 Patent at 4:50-53 (stating a speech recognition engine “converts [voice commands] into data messages based on the available recognition grammar”); 6:21-24 (providing express definition); 6:25-43 (depicting recognition grammars in Table 2). Table 2 immediately following the patentee’s express definition “provides a partial source code listing of the recognition grammars used by the speech recognition engine of the preferred embodiment for obtaining weather information.” ’431 Patent at 6:25-18; ’084 Patent at 6:39-42.

TABLE 2

---

?WHAT__IS	?the weather	?[info information report conditions]
	? ( ?like in )	
	[	
UScities.n	{<param1 \$n.zip> <param2 \$n.city> <param3 \$n.state>}	
	( (area code) AREA_CODE:n ) {<param1 \$n>}	
	( AREA_CODE:n (area code) ) {<param1 \$n>}	
	( (zip ?code) ZIP_CODE:n ) {<param1 \$n>}	
	( ZIP_CODE:n (zip ?code) ) {<param1 \$n>}	
	]	
	)	
	) {<menu 194>}	

---

Based on the partial source code listing in Table 2, “what” the speech recognition engine will recognize includes, for example, “what is the weather like in [city],” “weather information in area code [area code],” and “what is the weather report in zip code [zip code]”—all of which are words and phrases that are predefined by the rules set forth by the source code. “[T]he operation of the robust voice browser system” (*id.* ’431 Patent at 15:40-41) further demonstrates that “what” the speech recognition engine will recognize is a predefined set of words and phrases. The system “plays audio messages to the user presenting a list of options, such as, ‘stock quotes’, ‘flight status’, ‘yellow pages’, ‘weather’, and ‘news’... The user selects the desired option by speaking the name of the option into the voice enabled device 112.” *Id.* at 15:48-54; *see also id.* at 15:55-64 (disclosing that when a user says “yellow pages,” followed by “restaurants,” the user will be

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provided with “Mexican Restaurants,” “Italian Restaurants,” or “American Restaurants” as options the user can speak into the telephone).

Other than a predefined set of words and phrases, the specification does not disclose anything else as what a user can say that will be recognized by the speech recognition engine. The patentee’s express definition therefore must be modified accordingly. *See, e.g., Trading Techs. Int’l v. eSpeed, Inc.*, 595 F.3d 1340, 1353 (Fed. Cir. 2010) (altering express definition of “static” to include “manual” in front of “re-centering command” because “the specification only discusses manual re-centering commands ... [and] contains no reference to automatic re-centering.”).

Moreover, clarifying that the pronoun “what” refers to a predefined set of words and phrases will resolve syntactic errors in the context of the claims. *Cf. Sentius Int’l, LLC v. Microsoft Corp.*, No. 5:13-CV-00825-PSG, 2014 WL 4062741, at \*10 (N.D. Cal. Aug. 15, 2014) (declining to adopt a construction that “would grammatically render the claim nonsensical”). For example, claim 1 reads in part: “at least one **recognition grammar** associated with said computer ....” ’431 Patent at 20:10-13. Replacing “recognition grammar” in the claim with the express definition would result in syntactic errors that Amazon and Apple’s proposed construction would rectify (as shown in green below).

Portion of Claim 1 with Express Definition	Portion of Claim 1 with Amazon and Apple’s Proposed Construction
“at least one what a user can say that will be recognized by the speech recognition engine associated with said computer ....”	“at least one predefined set of words and phrases a user can say that will be recognized by the speech recognition engine associated with said computer ....”

c) The Court Should Reject Parus’s Construction

First, Parus’s construction is nonsensical. Defining recognition grammar as “what a user can say in natural language that will be recognized” incorrectly makes a user’s words a



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“recognition grammar.” A user might say, “Who is Alex Trebek?” and a speech recognition engine might recognize those words. Thus, “Who is Alex Trebek?” would be “what a user can say in natural language that will be recognized.” At best, “who is alex trebek” might be included in a recognition grammar but obviously is not itself a recognition grammar. In fact, “Who is Alex Trebek?” is a speech command, similar to “What is the weather in Chicago?” ’431 Patent at 6:51. A recognition grammar is clearly not a speech command, but instead is something “corresponding to” a speech command. *Id.* claim 1. Similarly, the claimed recognition grammar must be “selected by [the] speaker-independent speech recognition device.” *Id.* The speech recognition device obviously cannot select what a user says—the user determines what he or she says.

Further, Parus unjustifiably changes two aspects of the patent’s express definition: (1) adding “in natural language” to “what a user can say”; and (2) changing “speech recognition *engine*” to “speech recognition *device*.”

These departures from the express definition are unsupported by the specification. First, the phrase “in natural language” is nowhere in the specification. It modifies the scope of the claims, suggesting that the alleged invention captures the ability to recognize what a user can say “in natural language” even though the specification does not disclose what “in natural language” means. Such an unsupported modification would be improper. *Terlep v. Brinkmann Corp.*, 418 F.3d 1379, 1382 (Fed. Cir. 2005) (“The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims.”).

Second, there is no justification for replacing “engine” with “device,” as they are terms with different meanings. *See CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1317 (Fed. Cir. 2000) (“In the absence of any evidence to the contrary, we must presume that the use of these different terms in the claims connotes different meanings.”). The



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claims separately recite “speech recognition *device*” and “speech recognition *engine*.” (*Compare* ’431 Patent, claim 1 (reciting “speech recognition *device*”) with claim 18 (reciting speech recognition *engine*”); *see also* *OPTIS Wireless Tech. LLC v. ZTE Corp.*, No. 2:15-CV-300-JRG-RSP, 2016 WL 1599478, at \*8 (E.D. Tex. Apr. 20, 2016) (“[E]quating ‘model specific information’ with model specifications (‘model specific details’) would equate two different terms without justification.”).) Moreover, “*device*” is consistently used throughout the specification to describe *physical* telephones, PDAs, and household appliances (*see, e.g.*, ’431 Patent at 3:44-46, 6:6-8, 17:40-46), whereas “speech recognition *engine*” is consistently described as *software* (*see, e.g., id.* at 3:47-49 (“These spoken commands are then converted into data messages by a speech recognition *software* engine running on a user interface system.”); 4:49-50 (“The media server contains a speech recognition *software* engine.”). It would be improper to conflate these two terms.

3. “select the corresponding recognition grammar upon receiving [said/the] speech command”

Amazon / Google / LG / Samsung	Parus
upon receiving [said/the] speech command, select the recognition grammar for the corresponding category of information	plain and ordinary meaning

Amazon, Google, LG, and Samsung construe “corresponding” in the phrase “corresponding recognition grammar” to define a specific relationship between the recognition grammar and the speech command—the recognition grammar corresponds to the category of information of the speech command. This gives specific meaning to the word “corresponding.” Parus, on the other hand, seeks to deprive the term “corresponding” of any meaning. It incorrectly asserts that the “plain and ordinary” meaning of a “corresponding recognition grammar” encompasses having a single “artificial neural network” that corresponds to any speech command. Ex. A at 179. That runs afoul of controlling Federal Circuit precedent.

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When a patent uses a term, that term must be given meaning with “regard for the full claim language and the written description.” *In re Power Integrations, Inc.*, 884 F.3d 1370, 1375 (Fed. Cir. 2018). In *Power Integrations*, the Federal Circuit construed the word “coupled” to require “a specific control relationship,” rejecting the assertion that “every element anywhere in the same circuit is potentially ‘coupled’ to every other element.” *Id.* at 1375-76.

Similarly, here, “corresponding” must be given meaning. It cannot be the case that any recognition grammar that might be used also “corresponds” to a speech command; otherwise, the claims could have simply read: “select the ~~corresponding~~ recognition grammar upon receiving said speech command.” Courts properly reject a construction when it “improperly omit[s] any consideration of the disclosure in the specification” or is so overbroad that it “does not define what type of functional relationship is required” and “renders claim language meaningless.” *Id.*

The intrinsic record confirms that “corresponding” specifically refers to how different recognition grammars correspond to different categories of information. For example, Table 2 describes “recognition grammars ... for obtaining weather information.” ’431 Patent at 6:25-28. Thus, when a user asks, “What is the weather in Chicago,” the recognition grammars for weather information are used to recognize the user’s speech. *Id.* at 6:44-52. Other exemplary categories that are available to users include “stock quotes,” “flight status,” “yellow pages,” and “news.” *Id.* at 15:46-51; *see also id.* at Table 3 (code relating to these categories). To process these speech commands, the system invokes a recognition grammar corresponding to the category of information being sought. Thus, a user “may speak into his telephone the phrase ‘yellow pages’” and the system will use the yellow pages recognition grammars to recognize the word “restaurant.” *Id.* at 15:55-60. Moreover, the Asserted Patents describe “database records [that] may **correspond** to web sites that provide ‘weather’ information.” ’431 Patent at 5:16-17. These database records “contain a field indicating the ‘category’ of the record” such as “weather.” *Id.* at 5:33-36 and

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Table 1. The entire system thus has elements that correspond based on a category.

In contrast, Parus’s claim interpretation disregards the disclosure of the Asserted Patents showing that particular recognition grammars correspond to a given speech command by assuming that a single recognition grammar—the “artificial neural network”—will “correspond” to all speech commands no matter what the speech command is. *See* Ex. A at 179. Such a reading would render the term “correspond” meaningless. Parus’s construction must fail because its “unduly broad reading of the language ... is unsupported by the specification.” *Power Integrations*, 884 F.3d at 1376.

4. “speaker-independent speech recognition device”

Amazon / Apple	Google / LG / Samsung	Parus
speech recognition device that does not adapt to individual speakers	speech recognition device that does not use predefined voice patterns to recognize spoken words	device capable of recognizing spoken audible inputs that need not be trained to recognize the voice patterns of an individual user

a) Amazon / Apple’s Position

The “starting point” of claim construction is “the ordinary and customary meaning ... that the term would have to a person of ordinary skill in the art.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). Here, the ordinary and customary meaning of “speaker-independent speech recognition device” is “speech recognition device that does not adapt to individual speakers.” One of ordinary skill would have understood “speaker-independent speech recognition device” to mean a speech recognition device that is independent of the speaker, *i.e.*, does not use information about the individual speaker. Declaration of Dr. Padhraic Smyth (“Smyth Decl.”) ¶ 33; Ex. G at DEFS\_0000019 (“Speaker-independent systems require no training phase with data of users.”); Ex. H at DEFS\_PA\_00005066 (explaining that a speaker independent system does not require “speaker-specific training data”). This interpretation is also consistent with the ordinary

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use of the term “independent,” which means “not contingent.” Ex. I at DEFS\_00000012.

Because a speaker-independent device does not use information about the individual speaker, it is distinct from a device that uses speaker-specific training. Smyth Decl. ¶ 34; Ex. H at DEFS\_PA\_00005066 (stating that a speaker-*dependent* system requires “a sufficient amount of data” of a speaker to “adequately train the speaker-dependent templates”); Ex. J at PARUS\_00008718 (“The problem of speaker-dependent systems is that ... half an hour of speech from the specific speaker is generally needed[.]”). Devices that adapt to a specific user through use and training are, by definition, not “speaker-independent.” See Smyth Decl. ¶ 34; Ex. G at DEFS\_00000020 (requiring “adaptation algorithms” to perform speaker adaptation); Ex. K at PARUS\_00008647 (requiring “Bayesian learning procedure” to perform speaker adaptation).

The specification confirms that the ordinary meaning applies. One of the stated objectives of the asserted patents is “to allow users to gather information from web sites from any location where a telephonic connection can be made.” ’431 Patent at 3:12-15. Specifically, a user establishes connection to a voice browsing system by calling a telephone number. *Id.* at 15:41-46. “Once the connection is established,” the system plays a list of options to the user, such as stock quotes, weather, through which the user can request the desired information. *Id.* at 15:46-51. In other words, the voice browsing system lacks any procedure for identifying the user, let alone any way of adapting to the speech of a particular user. Smyth Decl. ¶ 35. This is consistent with the patents’ stated goal of providing easy access to the claimed information service anywhere phone service is available, and regardless of who the user is and where he or she is located. The specification further states that the speaker-independent voice browsing system “use[s] phonemes to recognize spoken words and not predefined voice patterns.” In other words, the system does not make use of voice patterns of individual speakers. ’431 Patent at 4:38-43; Smyth Decl. ¶ 36.

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b) Google / LG / Samsung’s Position

A speaker-independent speech recognition device is a “speech recognition device that does not use predefined voice patterns to recognize spoken words.” As the specification explains:

The voice browsing system recognizes naturally spoken voice commands and is speaker-independent; it does not have to be trained to recognize the voice patterns of each individual user. ***Such speech recognition systems use phonemes to recognize spoken words and not predefined voice patterns.***

’431 Patent at 4:38-44. Thus, a speaker-independent speech recognition device “does not have to be trained to recognize the voice patterns of each individual user ... [because these] systems use phonemes to recognize spoken words and not predefined voice patterns.” *Id.* at 4:40-43. This definition is consistent with how one of ordinary skill would understand the term; speaker-independent systems do not use “data of users.” Ex. G at DEFS\_0000019. “Where, as here, the disputed claim term is technical or a term of art, the best source for understanding it is the specification from which it arose.” *AquaTex Indus., Inc. v. Techniche Sols.*, 419 F.3d 1374, 1380 (Fed. Cir. 2005) (internal markings and citation omitted). Thus, Google/LG/Samsung’s construction applies. In contrast, Parus’s construction recites only a potential benefit of a speaker-independent speech recognition device; not what it actually is.

c) The Court Should Reject Parus’s Construction

Parus’s construction—“device capable of recognizing spoken audible inputs that need not be trained to recognize the voice patterns of an individual user”—is incorrect. The specification does not support such a deviation from the customary meaning. It states: “The voice browsing system recognizes naturally spoken voice commands and is speaker-independent; it does not have to be trained to recognize the voice patterns of each individual user.” ’431 patent at 4:38-42. This sentence simply describes a ***benefit*** of a speaker independent system, *i.e.*, that individual training is not needed. It does not ***define*** the term “speaker-independent.” Smyth Decl. ¶ 37. The claimed

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system is “speaker independent” because its operation does not depend on the speaker whatsoever. Merely observing that the system is independent of the speaker, and therefore does not need to be trained for individual users, does not amount to lexicography that redefines the term “speaker independent.” Indeed, the “exacting” standard for lexicography requires the patentee to “clearly express an intent to redefine the term.” *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365-66 (Fed. Cir. 2012) (internal quotation marks and citation omitted).

Moreover, the phrase “need not be trained” in Parus’s construction introduces ambiguity into the claim language. *See Ex parte Breed*, No. 2012-003990, 2014 WL 2536964, at \*2-3 (P.T.A.B. June 4, 2014) (holding that the phrase “can be” renders the claim indefinite, because it is “susceptible to more than one plausible construction,” *i.e.*, a required capability or a mere possibility). Does “need not be trained” mean that the system *can* work without training, but may not perform optimally? What performance metrics determine whether there is a “need” for training? Does a system that is “trained” still fall within the scope of the claim? Smyth Decl. ¶ 37. These questions make clear that “need not be trained” is not a test or definition of speaker-independent—it is just a description of a potential benefit of a “speaker-independent” system.

5. “instruction set for identifying [said/the] information to be retrieved”

Amazon	Parus
Governed by pre-AIA 35 U.S.C. § 112, ¶ 6. <b>Function:</b> identifying [said/the] information to be retrieved <b>Structure:</b> Indefinite.	plain and ordinary meaning

As an initial matter, the meaning of “instruction set for identifying [said/the] information to be retrieved” is unclear even without regard to § 112, ¶ 6. Neither “instruction set” nor “identifying [said/the] information” appears in the specification. The claim requires the “instruction set” to be “associated with” a computer, and “corresponding” to a recognition grammar, but does not specify what this association or correspondence entails. ’431 Patent, claim



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1. It also requires that “said computer” be configured to “retrieve said instruction set” and “further configured” to perform certain actions, including accessing certain web sites, but does not explain whether or how the computer uses the “instruction set” to perform any of these subsequent actions.

The specification indicates that the instruction set does not perform these actions, and that “identifying the information to be retrieved” is distinct from accessing websites. The specification discloses that “the IVR application may ask the user to *identify* the zip code of the area where the restaurant should be located.” ’431 Patent at 16:1-2. It also discloses that the server somehow processes the recognition result, “identifying” keywords such as “weather” and “Chicago.” *Id.* at 6:47-52. Therefore, the only plausible interpretation of “identifying the information to be retrieved” is identifying the user’s request for a particular piece of information. Smyth Decl. ¶ 39. This is consistent with the plain meaning of “to be,” which indicates a target or goal. Thus, “identifying the information to be retrieved” is a function separate from accessing websites to retrieve the information after it has been identified. But neither the specification—which never refers to an “instruction set”—nor the claim explains how the instruction set identifies the information to be retrieved. *Id.* The claim phrase is indefinite for this reason alone. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014).

The claim phrase is also indefinite under § 112, ¶ 6. The phrase “instruction set” does not connote sufficiently definite structure to perform the claimed function of “identifying the information to be retrieved.” *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1350 (Fed. Cir. 2015). For example, in *Global Equity Mgmt. (SA) Pty. Ltd. v. Expedia, Inc.*, the court considered the construction of the term “program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window.” No. 2:16-cv-00095-RWS-RSP, 2016 WL 7416132, at \*27-29 (E.D. Tex. Dec. 22, 2016) (“*GEMSA*”). Judge Payne concluded that the term should be construed under § 112, ¶ 6 because it was “defined

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only by the function that it performs,” and the claims neither recited the “objectives and operations” of the code nor specified “[h]ow the code interacts with other code.” *Id.* at \*29; *see also Cypress Lake Software, Inc. v. Samsung Elecs. Am., Inc.*, 382 F. Supp. 3d 586, 615 (E.D. Tex. 2019) (claims reciting “code for” performing the functions of “detecting” user input and “presenting” a “navigation control” or a “visual component” governed by § 112, ¶ 6 because “the term ‘code for’ is defined only by the function that it performs”); *Cypress Lake Software, Inc. v. ZTE (USA)*, No. 6:17-cv-00300-RWS, 2018 WL 4035968, at \*9 (E.D. Tex. Aug. 23, 2018) (“the term ‘code for’ does not connote sufficiently definite structure”).

“Instruction set for” is no different from “code for.” An “instruction” is “a code that tells a computer to perform a particular operation.” Ex. L at DEFS\_00000015. A “set” is simply a collection of such “code.” The specification and the claims do not describe what instructions are included in the instruction set, how the instructions within the instruction set interact with each other, or how the instruction set interacts with other software components. Smyth Decl. ¶ 40. In other words, the “instruction set” is a black box. Therefore, “instruction set” does not connote sufficiently definite structure, and the claim phrase is governed by § 112, ¶ 6.

While the claims recite that the instruction set comprises “a plurality of pre-selected web site addresses,” that is insufficient to avoid the application of § 112, ¶ 6. Indeed, not just *any* structure will suffice. To avoid § 112, ¶ 6, the claim must recite sufficient structure for performing ***the claimed function in its entirety***. *See Cochlear Bone Anchored Sols. AB v. Oticon Med. AB*, 958 F.3d 1348 (Fed. Cir. 2020) (application of § 112, ¶ 6 avoided only if the recited structure “perform[s] entirely the recited function”); *St. Isidore Research, LLC v. Comerica Inc.*, No. 2:15-cv-1390-JRG-JSP, 2016 WL 4988246, at \*5 (E.D. Tex. Sept. 19, 2016) (same). Here, the “plurality of pre-selected web site addresses” is not capable of performing the claimed function of “identifying the information to be retrieved,” which requires identifying the specific information



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requested by the user. A preselected list of websites identifies, at most, potential sources of information, not the specific information requested by the user. Smyth Decl. ¶ 41. Moreover, a list of website *addresses* is not a set of instructions. Addresses are not code that causes a computer to perform actions. *Id.* The specification confirms the list of website addresses is just that, a list stored as “database records.” ’431 Patent at 5:33-53. Some actual software is required to perform the claimed function “identifying the information to be retrieved.” Smyth Decl. ¶ 41.

Because the claims do not disclose any structure for “identifying the information to be retrieved,” § 112, ¶ 6 applies, and the specification must disclose an algorithm for performing the claimed function. *See, e.g., Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1374 (Fed. Cir. 2015) (claimed “compliance mechanism” invalid under § 112, ¶ 6 where “the specification fails to disclose an operative algorithm” for the claimed functions); *Grecia v. Samsung Elecs. Am., Inc.*, 780 F. App’x 912, 916-17 (Fed. Cir. 2019) (claimed “customization module” indefinite under § 112, ¶ 6 where “specification merely describes the results of customization without any algorithm for configuring the claimed module to obtain those results”).

The specification here discloses no such algorithm. As discussed above, the “plurality of pre-selected web site addresses,” as shown in Table 1 of the specification, does not perform the claimed function. *See* ’431 Patent at 5:33-53. Table 2 does not perform the claimed function, either. It merely shows an example of a “recognition grammar.” *Id.* at 6:25-42. Because the claims recite “instruction set” and “recognition grammar” as parallel components, ’431 Patent, claim 1; ’084 Patent, claim 1, the “recognition grammar” cannot be part of the “instruction set.” *See* Smyth Decl. ¶ 42; *Bd. of Regents of the Univ. of Tex. Sys. v. BENQ Am. Corp.*, 533 F.3d 1362, 1371 (Fed. Cir. 2008) (“Different claim terms are presumed to have different meanings.”). Finally, Tables 3-6, which show examples of the “content extraction agent,” the “content fetcher,” and the “content descriptor file,” do not include an algorithm for “identifying the information to be

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retrieved.” They are responsible for properly extracting information from the web pages *after* “the information to be retrieved” has been identified. Smyth Decl. ¶ 42; ’431 Patent at 7:35-15:30, 7:2-4 (“The web browsing servers receive responses from web sites and extract the data requested by the user. This task is also known as ‘content extraction.’”). As Dr. Smyth explains, one of ordinary skill might be aware of ways to identify the information to be retrieved, but the problem is that the specification discloses none. Smyth Decl. ¶ 43; *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1337 (Fed. Cir. 2008) (“The inquiry is whether one of skill in the art would understand the specification itself to disclose a structure, not simply whether that person would be capable of implementing that structure.”) (quotation omitted). Therefore, the specification does not disclose an algorithm that is clearly linked to or associated with “identifying the information to be retrieved,” and the claim phrase is indefinite under § 112, ¶ 6.

## 6. “computer” / “computing device” phrases

Term	Amazon	Parus
said computer configured to first access said first web site of said plurality of web sites and, if said information to be retrieved is not found at said first web site, said computer configured to sequentially access said plurality of web sites until said information to be retrieved is found or until said plurality of web sites has been accessed	Governed by pre-AIA 35 U.S.C. § 112, ¶ 6. <b>Function:</b> first accessing said first web site of said plurality of web sites and, if said information to be retrieved is not found at said first web site, sequentially accessing said plurality of web sites until said information to be retrieved is found or until said plurality of web sites has been accessed <b>Structure:</b> computer performing algorithm described in the specification of the ’431 Patent at 7:14-34 and Tables 3, 4.	Plain and ordinary meaning
the computing device configured to access a first web site of the plurality of web sites and, if the information to be retrieved is not found at the first web site, the computer configured to access the plurality of web sites remaining in an order defined for accessing the listing of web	Governed by pre-AIA 35 U.S.C. § 112, ¶ 6. <b>Function:</b> accessing a first web site of the plurality of web sites and, if the information to be retrieved is not found at the first web site, accessing the plurality of web sites remaining in an order defined for accessing the listing of web sites until the information to be retrieved is found in at least one of the plurality of web sites or until the plurality of web sites have	Plain and ordinary meaning

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sites until the information to be retrieved is found in at least one of the plurality of web sites or until the plurality of web sites have been accessed	been accessed. <sup>2</sup> <b>Structure:</b> computer performing algorithm described in the specification of the ’084 Patent at 7:27-48 and Tables 3, 4.	
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The asserted independent claims recite “a computer” and “at least one computing device” configured to perform various functions. ’431 Patent, claim 1; ’084 Patent, claim 1. While both claims nominally recite a general purpose “computer,” they ultimately claim functions. Such claims are governed by § 112, ¶ 6. *See Williamson*, 792 F.3d at 1350; *see also Dig. Retail Apps, Inc. v. H-E-B, LP*, No. 6-19-CV-00167-ADA, 2020 WL 376664, at \*5 (W.D. Tex. Jan. 23, 2020).

In *Williamson*, the Federal Circuit held the term “distributed learning control module” was governed by § 112, ¶ 6 because “module” was simply a “generic description for software or hardware that performs a specified function.” 792 F.3d at 1350. In *Digital Retail*, the court construed the term “first communication module” under § 112, ¶ 6. 2020 WL 376664, at \*5. The court noted that in the context of the claims, “module” referred to generic software, and while the addition of “communication” before the term “module” “certainly refer[red] to software related to communication, this [was] nowhere near the ‘sufficiently definite structure’ required by Federal Circuit precedent.” *Id.*

The claims here are no different. The terms “computer” and “computing device,” just like “module,” are nothing more than black boxes for performing the claimed functions. *See*

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<sup>2</sup> In addition to the functions identified by Amazon in the chart, the claims also recite other functions performed by the computer or computing device. For example, claim 1 of the ’431 Patent additionally recites: “said computer configured to retrieve said instruction set corresponding to said recognition grammar selected by said speaker-independent speech recognition device; said computer further configured to access at least one of said plurality of web sites identified by said instruction set to obtain said information to be retrieved.” ’431 Patent, claim 1. However, because the computer or computing device performs *at least* the functions identified in the chart, they should *at least* include the algorithms described in the ’431 Patent at 7:14-34 and Tables 3, 4, and the ’084 Patent at 7:27-48 and Tables 3, 4.

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*Williamson*, 792 F.3d at 1350 (“[T]he word ‘module’ ... sets forth [a] black box recitation of structure.”). And the fact that a “computer” or “computing device” refers to a general purpose computer makes no difference; indeed, courts routinely construe “processor” terms under § 112, ¶ 6. *St. Isidore*, 2016 WL 4988246, at \*14-16 (construing phrases “a processor configured to verify the authenticity of the account access request based on the response” and “a processor configured to identify a second device associated with the account” under § 112, ¶ 6 when the “processor” phrases were defined only by the functions they performed); *see also Konami Gaming, Inc. v. High 5 Games, LLC*, No. 2:14-cv-01483-RFB-NJK, 2018 WL 1020120, at \*12-14 (D. Nev. Feb. 21, 2018) (construing “processor configured to execute a game displaying a matrix of symbol containing elements” under § 112, ¶ 6), *aff’d*, 756 F. App’x 994 (Fed. Cir. 2019); *Syneron Med. Ltd. v. Invasix, Inc.*, No: 8:16-cv-00143-DOC-KES, 2018 WL 4696971, at \*12-17 (C.D. Cal. Sept. 5, 2018) (construing phrase “processor ... configured to control RF energy supplied to [an RF/a removable] applicator tip” under § 112, ¶ 6). The “computer” or “computing device” here provides no more definite structure than a “processor.” Smyth Decl. ¶ 46.

The addition of “configured to” does not recite structure, either. If anything, this phrase makes clear that some configuration, *e.g.*, algorithm, is needed to achieve the claimed function, or desired effect, of sequentially accessing multiple web sites until the requested information is found. *See, e.g., Diebold Nixdorf, Inc. v. ITC*, 899 F.3d 1291, 1298 (Fed. Cir. 2018) (construing “cheque standby unit” “configured to” hold a check pending customer’s confirmation of a bank deposit under § 112, ¶ 6); *St. Isidore*, 2016 WL 4988246, at \*14 (processors configured to perform function); *Konami Gaming*, 2018 WL 1020120, at \*12-14 (same); *Syneron Med.*, 2018 WL 4696971, at \*13-15 (same). To achieve the claimed result of sequentially accessing websites until information is found, one of ordinary skill would need to design an algorithm to specify, at a minimum, how the order of accessing different website is defined, how to extract information from

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the websites, and how to determine the requested information is “not found” at a website, etc. Smyth Decl. ¶ 47. No such algorithm is recited in the claims. *Id.*

The “computer”/“computing device” phrases are therefore governed by § 112, ¶ 6. The corresponding structure, if any, is described in the ’431 Patent at 7:14-34 and Tables 3, 4 (and the same disclosures in the ’084 Patent at 7:27-48 and Tables 3, 4). As Dr. Smyth explains, these portions of the specification provide information on how the order of accessing different website is defined, how to extract information from the websites, and how to determine the requested information is “not found” at a website. Smyth Decl. ¶ 48; *see, e.g.*, ’431 Patent at 7:21-26 (“Each content extraction agent command 206 invokes the content extraction agent and identifies a content description file associated with the web page identified by the URL 204. This content description the[n] directs the extraction agent where to extract data from the accessed web page and how to format a response to the user utilizing that data.”), 7:54-62 (content extraction agent “web\_dispatch.pl” invoking content fetcher “webget.pl”), 10:28 (content fetcher “webget.pl” accessing content description file “service.ini”), 8:25 (“response failed”), 8:49 (“set priority”), 9:10 (subroutine “switch\_service”).

**7. “access at least one of [said/the] plurality of web sites identified by [said/the] instruction set to obtain [said/the] information to be retrieved”**

Google / LG / Samsung	Parus
search at least one of [said/the] plurality of web sites identified by [said/the] instruction set to obtain [said/the] information to be retrieved, not including retrieving a specific resource from a specific web site”	plain and ordinary meaning

During prosecution, the Applicant explicitly disclaimed “retrieving a specific resource from a specific web site” from the scope of the claims in response to the Examiner’s § 102 rejection based on U.S. Patent No. 6,157,705 (“Perrone”). Application No. 10/821,690, Response to Office Action dated July 7, 2005 at 11-12. As a result of this unambiguous disclaimer, the applicant is precluded “from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *e2Interactive, Inc. v. Blackhawk Network, Inc.*, 561 F. App’x 895, 897 (Fed. Cir.

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2014) (quoting *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003)). This limitation should thus be made explicit in the construction.

The prosecution history reflects how this limitation was essential to the patent being granted. Prior to amendment, claim 1 of the ’431 Patent application recited the broad concept of carrying out “specific actions,” including “gather[ing] information from said information sources connected to said network in response to said information requests.” Application No. 10/821,690, Application dated Apr. 9, 2004 at 30 (claim 1). The examiner explained that Perrone disclosed all limitations of the original claim 1, including the foregoing limitation. Application No. 10/821,690 Non-Final Rejection dated July 7, 2005 at 3 & 4.

To overcome this rejection, the Applicant struck the language reciting “gather[ing] information from information sources connected to a network,” replacing it with the limitation to be construed: “access at least one of said plurality of web sites identified by said instruction set to obtain said information to be retrieved.” Ex. C, ’431 File History at PARUS\_00005410. The Applicant explained that the amended claims were an advancement over the prior art, because in Perrone, “users cannot retrieve desired information from a plurality of pre-selected web sites by uttering speech commands.” *Id.* at PARUS\_00005419. The Applicant contrasted this with Perrone, in which “*speech commands correspond to specific resources on specific web sites, and uttering speech commands allows users to retrieve the specific resources from the specific web sites.*” *Id.* “The system disclosed by the Perrone Patent does not access a plurality of pre-selected web sites in a sequential manner until the desired information is found.” *Id.* This is precisely the type of clear, unmistakable disclaimer of claim scope that precludes the Applicant from later recapturing it. *e2Interactive*, 561 F. App’x at 897 (finding a clear disclaimer from statements regarding what the Weber prior art discloses and fails to disclose). Thus, the correct construction of this term requires that it “not includ[e] retrieving a specific resource from a specific web site.”



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For greater clarity as to the scope of disclaimer, Google, LG, and Samsung further replace “access[ing]” with “search[ing].” This emphasizes the difference between retrieving specific resources on specific websites and searching for information for pre-selected websites—in performing the former, the location and existence of the information are known. In its disclaimer, the Applicant specifically distinguished Perrone at 11:19-29, which describes accessing “Resources 60 that are several layers deep in ... the Web page 200.... For example, the phrase ‘palo alto office’ is associated with a Web page ... [which] enables the user to jump into the contents of a subdirectory using a single verbal command.” Ex. D, Perrone at 11:23-27. In other words, Perrone has a specific resource that will be accessed in response to the request. In contrast, the Asserted Patents describe the possibility that “[i]f the information requested by the user cannot be found in the first web site, then the web browsing server 102 will *search* the second ranked web site and so forth down the line until the requested information is retrieved or no more web sites left to check.” ’431 Patent at 16:39-43. The Asserted Patents further describe using a search term such as “the ‘city’ name or ZIP code in order to retrieve [] weather information.” ’431 Patent at 7:28-30. “Accessing” incorrectly encompasses the example of retrieving a specific resource from a specific website. “Searching” properly excludes that disclaimed concept, describing the claimed situation in which information may or may not be found and retrieved.

8. **“the speech command comprising an information request provided by the user”**

Google / LG / Samsung	Parus
Indefinite	plain and ordinary meaning

The claims of the ’084 Patent are indefinite because they “recit[e] both an apparatus and a method of using that apparatus.” *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005). Claims that mix apparatus and method elements are indefinite because “a manufacturer or seller of the claimed apparatus would not know from the claim whether it might

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also be liable for contributory infringement because a buyer or user of the apparatus later performs the claimed method of using the apparatus.” *Id.* “Thus, it is unclear whether infringement ... occurs when one creates a system that allows the user [to perform the method step], or whether infringement occurs when the user actually uses” the apparatus to perform the method step. *Id.*

Here, the plain claim language requires user action because the claimed “speech command” comprises “an information request ***provided by the user.***” Infringement is unclear until the user has “provided” an “information request.” Only then can it be determined whether the apparatus will “select the corresponding recognition grammar upon receiving the speech command”—some speech commands provided by the user may trigger selection of a corresponding recognition grammar, while others do not. In contrast, the ’431 Patent recites that the speech command comprises “an information request ***selectable by the user,***” language that recites a function of the claimed apparatus and where infringement can be determined based on whether the selectable command corresponds to a recognition grammar.

Similar apparatus claims reciting the steps of “operation of the input device by the user” and “movement by the user” were thus rejected as indefinite in *E-Watch Inc. v. Apple, Inc.*, No. 2:13-cv-1061, 2015 WL 1387947, at \*5 (E.D. Tex. Mar. 25, 2015). There, the court highlighted the difference between mere functional language and an impermissible method step—in one claim, the similar limitation recited the permissible functional limitation of “***being movable,***” rather than the method step “***movement by the user.***” *Id.* at \*6. This is precisely the distinction in the two patents here, between “***selectable***” information requests and information requests “***provided by the user.***” As the *E-Watch* court explained, “the patentee understood how to draft claim language that referred to the capabilities of an element,” and it would be improper for the court to “redraft claims, whether to make them operable or to sustain their validity.” *Id.*

The key question for *IPXL* indefiniteness is ultimately whether the claims recite user action



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to determine infringement, whether explicitly or implicitly. Thus, in *UltimatePointer, L.L.C. v. Nintendo Co.*, the court found the limitation “while the pointing line is directed at a ... calibration point” to be indefinite under *IPXL* because it “effectively requir[es] the user to use the pointing device” even though the claim language did not explicitly mention a user. No. 6:11-cv-496, 2013 WL 2325118, at \*22-23 (E.D. Tex. May 28, 2013). Thus, “the claim is not definite as to whether the claim is infringed when the pointing-device apparatus is made or sold, or when a user actually uses it to direct a pointing line.” *Id.* at \*23. The claims of the ’084 Patent likewise are not definite as to whether infringement occurs based on when the system is made or sold, or when an information request is provided by the user. The claims of the ’084 Patent are thus indefinite.

## 9. “voice enabled device”

Defendants	Parus
wireline or wireless telephone, IP phone, wireless PDA, or other wireless device	a wired or wireless voice communication device associated with audio input (e.g., a microphone) and audio output (e.g., a speaker) capabilities

The specification defines the term “voice enabled device”: “This is accomplished by providing a voice browsing system and method that allows users to browse web sites using conversational voice commands spoken into any type of voice enabled device (*i.e., any type of wireline or wireless telephone, IP phone, wireless PDA, or other wireless device*).” ’431 Patent at 3:41-46. “When a patentee explicitly defines a claim term in the patent specification, the patentee’s definition controls.” *Martek*, 579 F.3d at 1380.

While Defendants rely on the explicit definition in the specification, Parus wholly contradicts it, expanding “other wireless device” to include any “wired” device with a microphone and speaker. There is simply no basis for inserting “wired” into the definition of “voice enabled device.” Indeed, the patentee omitted wired devices despite including a “wireline ... telephone.” Instead, other than phones, it defined the term to include only “wireless PDA[s]” and “other

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wireless device[s].” This was no accident; the central purpose of the invention is to allow access to web sites on wireless devices. The specification specifically decries the physical encumbrance inherent in wired devices: “Desktop computers are very large and bulky and are difficult to transport. Laptop computers solve this inconvenience, but many are still quite heavy and are inconvenient to carry. Further, laptop computers cannot be carried and used everywhere a user travels.” ’431 Patent at 1:42-46. Rather, the patents focus on the convenience provided by phones and PDAs, describing the need for access to web sites on such wireless devices and the purported problems of such systems in the prior art. *Id.* at 1:57-2:29. The solution provided is to provide voice based web access on wireless devices when a wired computer is unavailable:

The [] preferred embodiment of the present invention allows users to access and browse web sites ***when they do not have access to computers with Internet access.*** This is accomplished by providing a voice browsing system and method that allows users to browse web sites using conversational voice commands spoken into any type of ***voice enabled device (i.e., any type of wireline or wireless telephone, IP phone, wireless PDA, or other wireless device).***

*Id.* at 3:39-46. None of the multitude of statements defining a voice enabled device recite wired devices; instead, they are repeatedly described as wireless. *Id.* at 6:6-8 (“voice enabled device 112 (i.e., any type of wireline or wireless telephone, Internet Protocol (IP) phones, or ***other special wireless units***”); 17:40-42 (“voice enabled device 504 (i.e., wireline or wireless telephones, Internet Protocol (IP) phones, or ***other special wireless units***”); 19:34-36 (“voice enabled device (i.e., wireline or wireless telephones, IP phones, or ***other wireless units***”). The patentee was free to recite “wired or wireless devices” yet did not do so. Further, nowhere does the specification so much as mention audio input or output components, voice communication devices, or include any discussion of microphones or speakers. Parus seeks to expand the definition of “voice enabled device” beyond the specification and into material the specification specifically teaches away from. Parus’s construction must be rejected.

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Claim 4 of both patents does not provide a basis for expanding the scope of “voice enabled device” to include wired devices other than phones. To the extent it does, such an interpretation would break the chain of priority to the Asserted Patents. Claim 4 states:

4. The system of claim 1 wherein said voice enabled device is a standard telephone, an IP telephone, a cellular phone, a PDA, a personal computer, a DVD player, a television or other video display device, a CD player, a MP3 player, or any other device capable of transmitting said audio message.

Each of the additional exemplary devices—a personal computer, a DVD player, a television, a CD player, or an MP3 player—could exist in wireless, portable forms and thus provides no basis for altering the express definition and clear disclosures of the specification.

Moreover, the specification has no discussion of claim 4’s additional devices, and claim 4 itself appears for the first time in the 2004 application that resulted in the ’431 Patent. *See, e.g.*, US Patent App. No. 09/776,996 (application from which both patents claim priority). To construe “voice enabled device” based on dependent claim 4 would require breaking the chain of priority to this earlier application, because the earlier application lacks written description support for such a broad construction. 35 U.S.C. § 120; *D Three Enters., LLC v. SunModo Corp.*, 890 F.3d 1042, 1047 (Fed. Cir. 2018). Thus, in *D Three*, the Federal Circuit affirmed a summary judgment motion based on a lack of priority where the Asserted Claims “were broader than the invention disclosed in the 2009 Application.” *Id.* at 1045. The 09/776,996 application does not contain claim 4 and does not have any other disclosure of the devices listed in claim 4. Thus, there is no disclosure upon which a PHOSITA may rely on to support a broader invention. The only description of the voice enabled device is the definition that Defendants cite. That clear definition holds. If there remains any doubt based on claim 4, the ambiguous claim term “should be construed to preserve its validity” by not breaking the priority chain. *See Ruckus Wireless, Inc. v. Innovative Wireless Sols., LLC*, 824 F.3d 999, 1004 (Fed. Cir. 2018).

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Dated: June 5, 2020

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**CERTIFICATE OF SERVICE**

Pursuant to the Federal Rules of Civil Procedure and Local Rule CV-5, I hereby certify that, on June 5, 2020, all counsel of record who have appeared in this case are being served with a copy of the foregoing via the Court’s CM/ECF system.

/s/ Luann L. Simmons

Luann L. Simmons